

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF ROSEWICK ROAD AND WASHINGTON AVENUE IN CHARLES COUNTY, MARYLAND. ROSEWICK ROAD IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION. THE TRAFFIC SIGNAL WILL BE INSTALLED AS PART OF CHARLES COUNTY GOVERNMENT PROJECT PGM# VC103-8-035.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE ROSEWICK ROAD APPROACHES OPERATING CONCURRENTLY AND THE WASHINGTON AVENUE APPROACHES OPERATING CONCURRENTLY.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR THE EASTBOUND AND WESTBOUND ROSEWICK ROAD APPROACHES AND THE NORTHBOUND AND SOUTHBOUND WASHINGTON AVENUE APPROACHES.

PEDESTRIAN INDICATIONS ARE PROVIDED ACROSS THE SOUTH LEG OF WASHINGTON AVENUE.

AP'S NOTES

TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

WASHINGTON AVENUE AND ROSEWICK ROAD - SOUTH LEG

TYPICAL INTERSECTION, STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS WASHINGTON AT ROSEWICK" *

WALK: RAPID TICK

* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPENDICULAR CROSSING IS * 10'

** MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH TWO (2) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS, INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

QUANTITY	DESCRIPTION
2 EACH	FOUR-CHANNEL, TIME-DELAY-OUTPUT, LOOP DETECTOR AMPLIFIER
1 EACH	EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER WITH INTERSECTION MONITOR HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET
1 EACH	VIDEO INTERFACE EQUIPMENT: 1-4 CAMERAS
46 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : - 4 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 2 EACH R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS WASHINGTON AVENUE"

EQUIPMENT LIST "C"

NO EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

QUANTITY	DESCRIPTION
LUMP SUM	MAINTENANCE OF TRAFFIC
8 C.Y.	TEST PIT EXCAVATION
540 L.F.	12 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
200 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
80 S.F.	DETECTABLE WARNING SURFACE
22 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
LUMP SUM	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
525 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
355 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
1010 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
300 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
360 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
80 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
1 EACH	METERED SERVICE PEDESTAL (120/240 VOLTS 60 AMPS)
3 EACH	NON-INVASIVE DETECTOR WITH 500 FOOT LEAD-IN CABLE
3 EACH	NON-INVASIVE DETECTOR WITH 1000 FOOT LEAD-IN CABLE
17 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
46 S.F.	INSTALL OVERHEAD SIGN
4 EACH	VIDEO DETECTION CAMERA
2 EACH	CONTROL CABLE, 250 FT. VIDEO DETECTION CAMERA TO CONTROLLER
2 EACH	CONTROL CABLE, 500 FT. VIDEO DETECTION CAMERA TO CONTROLLER
1 EACH	STEEL POLE WITH A SINGLE 50 FT. MAST ARM
2 EACH	STEEL POLE WITH A SINGLE 60 FT. MAST ARM
2 EACH	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
2 EACH	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
9 EACH	GROUND ROD - 3/4 INCH DIAMETER x 10 FOOT LENGTH
12 EACH	8 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
40 EACH	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
1 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
90 L.F.	ELECTRICAL CABLE - 1 CONDUCTOR NO. 4 A.W.G. - THHN/THWN
545 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.) TC
200 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
295 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
1970 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
2 EACH	16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
2 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
1 EACH	2 WIRE CENTRAL CONTROL UNIT
1 EACH	16.5 FT. STEEL "T" POLE WITH SINGLE 70 FT. MAST ARM
7 EACH	TRAFFIC BARRIER W-BEAM POST NORMAL 6 FT. LENGTH
1 EACH	BREAKAWAY PEDESTAL POLE (ANY SIZE)

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAYBE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-01 (SHOULDER WORK)

STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIM TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019

MR. JOHN MAYS
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013

MR. JOE HORTY
DISTRICT UTILITY ENGINEER
PHONE: (410) 841-1039

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. MICHAEL SNYDER
CHARLES COUNTY
PHONE: (301) 396-5829

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
PHASE 1 + 5	R	R	R	R	R	R	R	R	R	R	R	R	DW	DW	
1 + 5 CHANGE	PHASE 1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5 OR PHASE 2 + 6														
PHASE 1 + 6	R	R	R	R	R	R	R	R	R	R	R	R	WK	WK	
1 + 6 CHANGE	PHASE 2 + 5	R	R	R	R	R	R	R	R	R	R	R	WK	WK	
PHASE 2 + 5	2 + 5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW	DW	
PHASE 2 + 6	PED. CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	FL/DW	FL/DW	
2 + 6 CHANGE	PHASE 3 + 7	R	R	R	R	R	R	R	R	R	R	R	DW	DW	
3 + 7 CHANGE	PHASE 3 + 8	R	R	R	R	R	R	R	R	R	R	R	DW	DW	
3 + 8 CHANGE	PHASE 4 + 7	R	R	R	R	R	R	R	R	R	R	R	DW	DW	
PHASE 4 + 7	4 + 7 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW	DW	
PHASE 4 + 8	4 + 8 CHANGE	R	R	R	R	R	R	R	R	R	R	R	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	

SHA NO:BW407M84
ROSEWICK
RD@WASHINGTON RD;
CHARLES COUNTY

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY
THAT THESE DOCUMENTS WERE PREPARED OR
APPROVED BY ME, AND THAT I AM A DULY LICENSED
PROFESSIONAL ENGINEER UNDER THE LAWS OF
THE STATE OF MARYLAND.
LICENSE NO. _____ EXPIRATION DATE: _____

PGM# VC103-8-035 TSP-3



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION
TRAFFIC SIGNALIZATION PLAN
ROSEWICK ROAD AND WASHINGTON AVENUE
La Plata, Maryland

WR&A

Whitman, Requardt
and Associates, LLP
801 South Caroline Street
Baltimore, Maryland 21231
(410) 235-3450

REDLINE NO. 3
7/31/2008

DRAWN BY: S. BLOSS
CHECKED BY: N. LEARY
SCALE: 1" = 20'
DATE: 9/26/2008

F.A.P. NO. SEE TITLE SHEET
S.H.A. NO. SEE TITLE SHEET
COUNTY: CHARLES
LOG MILE: 08CR0500.00

TS NO. 4643
T.I.M.S. NO. H600
SHEET NO. 129 OF 158

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